

Lyon County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 24 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Lyon County economy.¹

These 24 sectors have a total direct output of approximately **\$2.13 billion** and support **3,209.1 jobs** in Lyon County. Running the model for all 24 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Lyon County Economy								
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional	Output ⁵	Output % of Gross Regional Product		
				Product ⁴		Troduct		
Direct Effect	3,209.1	17.27%	\$301,231,476	23.92%	\$2,134,137,785	169.44%		
Indirect Effect	1,435.4	7.73%	\$101,792,458	8.08%	\$228,556,682	18.15%		
Induced Effect	693.6	3.73%	\$45,207,772	3.59%	\$82,477,691	6.55%		
Total Effect	5,338.1	28.73%	\$448,231,706	35.59%	\$2,445,172,158	194.13%		

As shown in the above table, agriculture, food, and food processing sectors support 5,338.1 jobs, or 28.73% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$2.45 billion, roughly 194.13% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 24 agriculture, food, and food processing sectors is approximately \$448.2 million, or 35.59% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 35.59% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

- 3 Value added = labor income + indirect business taxes + other property type income.
- $4\ GRP = final\ demand\ of\ households + governments\ expenditures + capital + exports\ -\ imports\ -\ institutional\ sales.$
- 5 Output = intermediate inputs + value added.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

In the top ten agriculture, food, and food processing sectors by employment, the meat processed from carcasses sector is the top employer with **804.2 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Lyon County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Meat processed from carcasses	804.2	\$428,726,295		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	655.2	\$69,696,636		
Dog and cat food manufacturing	543.4	\$781,228,770		
Bread and bakery product, except frozen, manufacturing	441.1	\$65,966,438		
Truck transportation	400.8	\$51,337,846		
Wholesale trade	310.2	\$63,569,756		
Animal, except poultry, slaughtering	194.1	\$146,562,823		
All other crop farming	131.2	\$8,841,884		
Animal production, except cattle and poultry and eggs	122.6	\$14,294,418		
Soybean and other oilseed processing	105.0	\$555,471,831		

The dog and cat food manufacturing sector directly contributes approximately \$781.2 million to the Lyon County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Dog and cat food manufacturing	543.4	\$781,228,770		
Soybean and other oilseed processing	105.0	\$555,471,831		
Meat processed from carcasses	804.2	\$428,726,295		
Animal, except poultry, slaughtering	194.1	\$146,562,823		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	655.2	\$69,696,636		
Bread and bakery product, except frozen, manufacturing	441.1	\$65,966,438		
Wholesale trade	310.2	\$63,569,756		
Truck transportation	400.8	\$51,337,846		
Rail transportation	49.9	\$22,830,528		
Oilseed farming	18.1	\$18,014,952		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Lyon County economy.

All Agriculture, Food, and Food Processing Sect	ors	
Sector	Total Employment	Total Output
Oilseed farming	18.1	\$18,014,951.71
Grain farming	35.2	\$11,513,410.57
Vegetable and melon farming	0.5	\$94,956.00
Fruit farming	3.9	\$329,740.43
Tree nut farming	0.02	\$3,547.49
Greenhouse, nursery, and floriculture production	7.4	\$977,782.61
All other crop farming	131.2	\$8,841,883.66
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	655.2	\$69,696,632.39
Dairy cattle and milk production	1.2	\$394,654.63
Poultry and egg production	0.4	\$264,241.01
Animal production, except cattle and poultry and eggs	122.6	\$14,294,417.38
Dog and cat food manufacturing	543.4	\$781,228,759.77
Other animal food manufacturing	10.2	\$14,375,565.53
Soybean and other oilseed processing	105.0	\$555,471,862.79
Animal, except poultry, slaughtering	194.1	\$146,562,820.43
Meat processed from carcasses	804.2	\$428,726,287.84
Bread and bakery product, except frozen, manufacturing	441.1	\$65,966,438.29
Frozen cakes and other pastries manufacturing	1.1	\$155,897.38
Breweries	4.3	\$3,316,024.78
Wineries	0.6	\$151,048.72
Sawmills	0.8	\$174,559.06
All other industrial machinery manufacturing	26.0	\$6,233,592.51
Veterinary services	35.1	\$3,948,983.19
Landscape and horticultural services	67.7	\$3,399,733.07

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Lyon County, the retail sector was omitted.